Abstract: I will describe a “geometric” origin for the famous “Bott periodicity” Morita equivalence between Cliff(8) and $\mathbb{R}$. Specifically, I will explain that that equivalence arises from quantizing the symplectic reduction of fermionic 8-dimensional space by an action by Spin(7). The quaternions and the Lie group $G_2$ will also make an appearance. Time permitting, I will speculate about a similar “periodicity” equivalence of conformal field theories predicted by conjectures in homotopy theory. In the CFT version, sporadic finite simple groups play a starring role.

See http://math.bu.edu/research/geom/seminar.html or contact Lino Amorim (lamorim@bu.edu) or Siu Cheong Lau (lau@math.bu.edu) for more information.